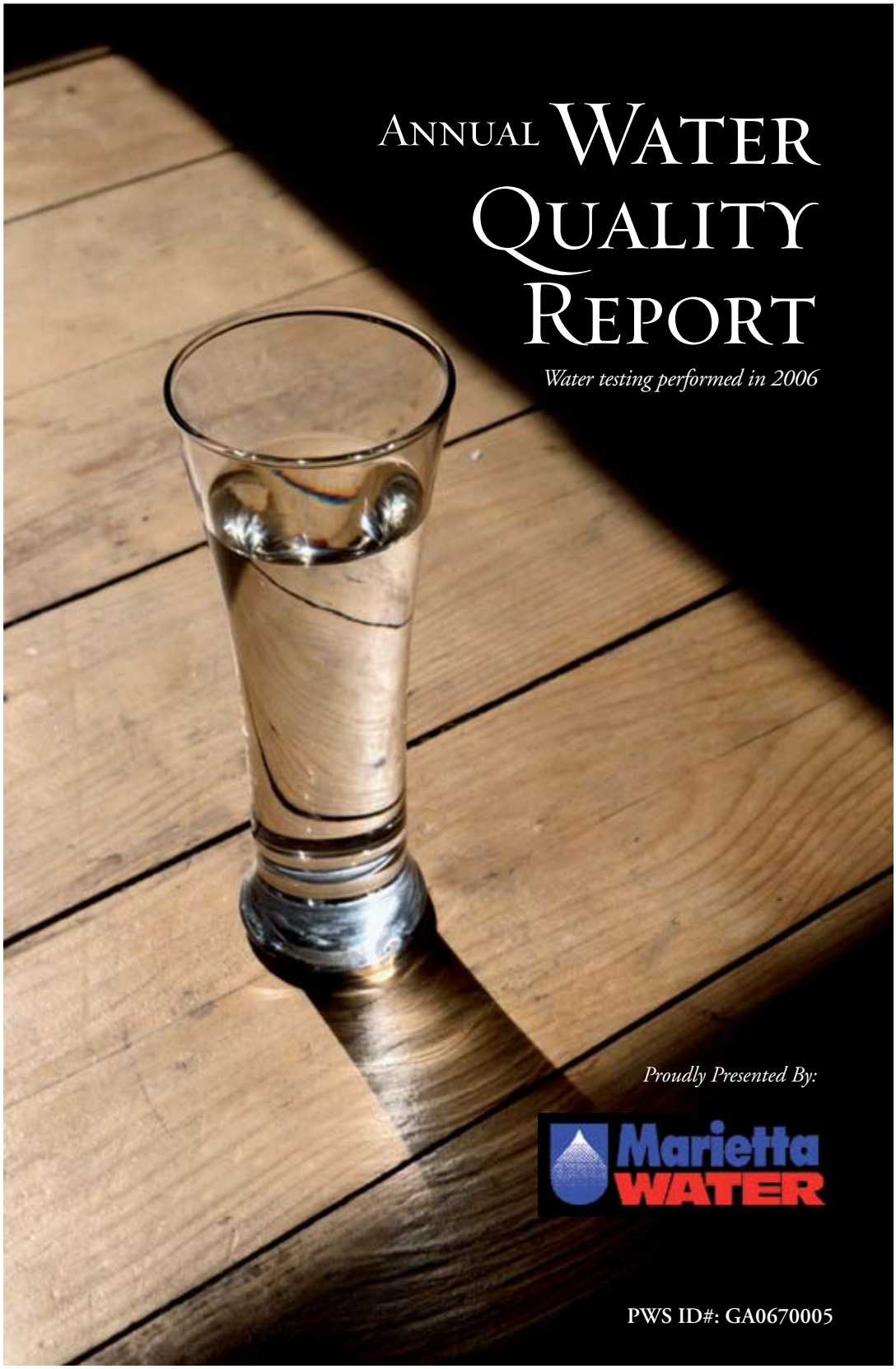

# Annual Water Quality Report

*Water testing performed in 2006*

*Proudly Presented By:*

Marietta WATER

**PWS ID#: GA0670005**

*Este informe contiene informacisn muy importante sobre su agua potable. Tradzzcalo o hable con alguien que lo entienda bien.*

## Continuing our Commitment

Marietta Water proudly presents our annual water quality report. This report provides you with a summary of our drinking water quality and covers all testing completed from January through December 2006. After reading it, we hope you will better understand where your water comes from and how the water is protected, treated, and tested before you drink it. You will find that Marietta Water delivers water to you that exceeds federal drinking water standards established by the U.S. EPA. Water is important to all of us—its availability, its quality, and its use. Marietta Water is committed to providing our consumers with high-quality water and excellent customer service. YOU are a customer of an award-winning utility. We are pleased to announce our latest accomplishments.

## Community Participation

Marietta Water operates under the supervision of the Board of Lights and Water (BLW). The BLW was created through the state legislature. There are seven board members including the mayor (as chair), a city council member (appointed by the mayor), and five other members of the community (appointed by the city council).

If you have comments or concerns regarding water-related issues, you can make an appointment to voice these concerns to the board by calling the board manager at (770) 794-5109. The board meets the Monday before the second Wednesday of each month. Marietta Water maintains regular operating hours of Monday through Friday, 7:00 a.m. to 4:00 p.m. To reach the service and maintenance department 24 hours a day, please call (770) 794-5230.

For more information about this report, or for any questions relating to your drinking water, please call Tim Marshall, Environmental Compliance Coordinator, at (770) 794-5229.

## Where Does My Water Come From?

Marietta Water purchases water from the Cobb County-Marietta Water Authority (CCMWA), a public utility founded in 1951. The CCMWA's treatment facilities are supplied by two surface water sources. The James E. Quarles Treatment Facility, built in 1953, withdraws water from the Chattahoochee River. The Quarles plant, which is undergoing an expansion, will treat a maximum of 84 million gallons of water a day. This water is distributed and utilized on the eastern side of Cobb County and Marietta. The Hugh A. Wyckoff Treatment Facility, put online in 1972, withdraws water from Lake Allatoona. Lake Allatoona is a Corps of Engineers impoundment in north Cobb, south Cherokee, and south Bartow counties. This man-made, multiuse lake is part of the Etowah River Basin. The Wyckoff plant can treat a maximum of 72 million gallons of water a day. This water is distributed and utilized on the north and west side of Cobb County and Marietta.

**The Georgia Association of Water Professionals (GAWP) selected Marietta Water as the 2005 Water Distribution System of the Year WINNER!!! A score of 94.6 was attained.**


**Marietta Water also wins the GAWP 2005 Best Consumer Confidence Report Award in the Large Surface Water System Category! Marietta Water edged out fifteen other municipalities in this category to take the first-place finish!**

## Source Water Assessment

During 2002, the CCMWA and the Atlanta Regional Commission completed a source water assessment itemizing potential sources of water pollution to our surface drinking water supplies. This information can help you understand the potential for contamination of your drinking water supplies and can be used to prioritize the need for protecting drinking water sources.

A source water assessment is a study and report that does the following: identifies the area of land that contributes the raw water used for drinking water; identifies potential sources of contamination to drinking water supplies; and provides an understanding of the drinking water supply's susceptibility to contamination.

Individual source pollution involves actual facilities, which have contaminants on-site that can pose a potential health risk if humans consume those contaminants. Nonpoint source pollution is caused by development and by everyday activities that take place in residential, commercial, and rural areas; nonpoint source pollution is carried by rainfall to streams and lakes. After evaluating these sources of pollution, the report found the Chattahoochee watershed to have a high susceptibility ranking and the Lake Allatoona watershed to have a medium susceptibility ranking.

For more information on this project, visit the source water assessment Web site at www.atlantaregional.com/swap/, or you can request information by mail from the Environmental Planning Division, Atlanta Regional Commission, Attn: Matthew Harper, 40 Courtland Street NE, Atlanta, GA 30303.

## Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791.

## Substances That Might Be in Drinking Water

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals, in some cases, radioactive material, and substances resulting from the presence of animals or from human activity. Substances that may be present in source water include:

Microbial Contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, or wildlife;

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming;

Pesticides and Herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses;

Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and may also come from gas stations, urban stormwater runoff, and septic systems;

Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

## Sampling Results

During the past year we have taken thousands of water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic, or synthetic organic contaminants. Every regulated contaminant that we detected in the water, even in the minutest traces, is listed here. Although all of the substances listed are under the Maximum Contaminant Level (MCL), we feel it is important that you know exactly what was detected and how much of the substance was present in the water.

The state allows us to monitor for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

### REGULATED SUBSTANCES

| SUBSTANCE (UNIT OF MEASURE) | YEAR SAMPLED | MCL [MRDL] | MCLG [MRDLG] | AMOUNT DETECTED | RANGE LOW-HIGH | VIOLATION | TYPICAL SOURCE |
|---|---|---|---|---|---|---|---|
| **Chlorine**[1] (ppm) | 2006 | [4] | [4] | 2.4 | ND–2.4 | No | Water additive used to control microbes |
| **Chlorite** (ppm) | 2006 | 1 | 0.8 | 0.37 | 0.14–0.37 | No | By-product of drinking water disinfection |
| **Fluoride** (ppm) | 2006 | 4 | 4 | 0.98 | 0.61–0.98 | No | Erosion of natural deposits; Water additive which promotes strong teeth. |
| **Haloacetic Acids [HAA]**[2] (ppb) | 2006 | 60 | 0 | 30.7 | 11.4–68.3 | No | By-products of drinking water disinfection |
| **Nitrate** (ppm) | 2006 | 10 | 10 | 0.98 | 0.30–0.98 | No | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits |
| **TTHMs [Total Trihalomethanes]** (ppb) | 2006 | 80 | 0 | 50.1 | 15.1–73.8 | No | By-products of drinking water chlorination |
| **Total Coliform Bacteria** (% positive samples) | 2006 | 5% of monthly samples are positive | 0 | 0.91 | NA | No | Naturally present in the environment |
| **Total Organic Carbon** (ppm) | 2006 | TT | NA | 1.6 | 1.10–1.60 | No | Decay of organic matter in the water withdrawn from sources such as lakes and streams. |
| **Turbidity**[3] (NTU) | 2006 | TT=1 NTU | 0 | 0.18 | ND–0.18 | No | Soil runoff |
| **Turbidity** (Lowest monthly percent of samples meeting limit) | 2006 | TT=95% of samples <0.3 NTU | 0 | 100 | NA | No | Soil runoff |

**Tap water samples were collected from 50 sample sites throughout the community**

| SUBSTANCE (UNIT OF MEASURE) | YEAR SAMPLED | ACTION LEVEL | MCLG | AMOUNT DETECTED (90TH%TILE) | SITES ABOVE ACTION LEVEL | VIOLATION | TYPICAL SOURCE |
|---|---|---|---|---|---|---|---|
| **Copper**[4] (ppm) | 2005 | 1.3 | 0 | 0.03 | 0 | No | Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives |
| **Lead**[4] (ppb) | 2005 | 15 | 0 | 7 | 0 | No | Corrosion of household plumbing systems; Erosion of natural deposits |

[1] Detection limit for chlorine is 0.05 ppm. Disinfection was confirmed by heterotrophic plate count. This is a method that measures total bacteria in a sample. The result was within acceptable limits.

[2] This contaminant is regulated by the average concentration over a period of a year. The single value greater than the MCL is NOT a violation because during that monitoring period, the eight sites monitored averaged 30.7 ppb.

[3] Turbidity is a measure of the cloudiness of the water. It is monitored because it is a good indicator of the effectiveness of the filtration system.

[4] The next round of testing is due in 2008.

## Water Conservation Tips

Water conservation measures are an important first step in protecting our water supply. Such measures not only save the supply of our source water but can also save you money by reducing your water bill. Here are a few suggestions:

*Conservation measures you can use inside your home include:*

- Fix leaking faucets, pipes, toilets, etc.
- Replace old fixtures; install water-saving devices in faucets, toilets, and appliances.
- Wash only full loads of laundry.
- Do not use the toilet for trash disposal.
- Take shorter showers.

*Information on other ways that you can help conserve water can be found at www.epa.gov/safewater/publicoutreach/index.html.*

*You can conserve outdoors as well:*

- Water the lawn and garden in the early morning or evening.
- Use mulch around plants and shrubs.
- Repair leaks in faucets and hoses.

## Outdoor Water Use Restrictions in Effect in Marietta

### *Declared Drought Response Level Two*

The City of Marietta is requesting residents and businesses to observe water restrictions set by the Georgia Department of Natural Resources that ban outdoor water use from 10:00 a.m. to midnight Saturdays through Thursdays. No outdoor water use is permitted on Fridays. Outdoor water use is allowed during nonbanned hours on scheduled days as follows:

On Monday, Wednesday, and Saturday, even-numbered or unnumbered addresses may water from 12:01 a.m. to 10:00 a.m. only.

On Tuesday, Thursday, and Sunday, odd-numbered addresses may water from 12:01 a.m. to 10:00 a.m. only.

Marietta Water will strictly enforce the restrictions. Warnings are issued for a first offense. Subsequent offenses result in escalating fines for each offense up to $500, water service disconnection, and prosecution.

For more information, call (770) 794-5229.

| | MON | TUE | WED | THU | FRI | SAT | SUN |
|---|---|---|---|---|---|---|---|
| 12:01 AM - 10 AM | EVEN | ODD | EVEN | ODD | | EVEN | ODD |
| 10:01 AM - 12 AM | NO OUTDOOR WATER USE PERMITTED | | | | | | |


## *Cryptosporidium* and *Giardia* in Drinking Water

The CCMWA participated in a major drinking-water-quality testing program called the Supplemental Information Collection Rule (SICR). Two of the contaminants tested for under this rule are the parasites *Cryptosporidium* and *Giardia*, which have caused outbreaks of intestinal disease in the United States and abroad. These parasites are common in surface water and are very difficult to kill. Even a well-run water system may contain some live oocysts (in the case of *Cryptosporidium*) or cysts (in the case of *Giardia*). The U.S. EPA is working to resolve several scientific issues that will allow it to set *Cryptosporidium* and *Giardia* safety standards. Our 1999 testing, performed at the raw (untreated) water intake on the Chattahoochee River located immediately north of the Johnson Ferry Road crossing, revealed the presence of *Cryptosporidium* and *Giardia* in several months of samples. These organisms were detected in the water prior to treatment. During 1999, the water at Lake Allatoona was also tested. No oocysts or cysts were detected.

In order to comply with an upcoming federal regulation, the CCMWA has been monitoring for *Cryptosporidium* and *Giardia* in the raw water from both its water sources, the Chattahoochee River and Lake Allatoona. This monitoring was performed monthly during 2005. No *Cryptosporidium* oocysts were detected at either source. *Giardia* cysts were detected in two of the twelve samplings. Again, these organisms were detected in the water prior to treatment and only at the Chattahoochee River intake. Our treatment technique is designed and optimized to remove these contaminants. Therefore, no precaution about our drinking water is currently needed for the general public. See advice about special populations and a source for further information in the Special Health Information section.

## Table Definitions

**AL (Action Level):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

**MCL (Maximum Contaminant Level):** The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

**MCLG (Maximum Contaminant Level Goal):** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

**MRDL (Maximum Residual Disinfectant Level):** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**MRDLG (Maximum Residual Disinfectant Level Goal):** The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

**NA:** Not applicable.

**ND (Not detected):** Indicates that the substance was not found by laboratory analysis.

**NTU (Nephelometric Turbidity Units):** Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

**ppb (parts per billion):** One part substance per billion parts water (or micrograms per liter).

**ppm (parts per million):** One part substance per million parts water (or milligrams per liter).

**TT (Treatment Technique):** A required process intended to reduce the level of a contaminant in drinking water.